

From the  
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/JP2005/021634

International filing date (day/month/year)  
18.11.2005

Priority date (day/month/year)  
19.11.2004

International Patent Classification (IPC) or both national classification and IPC  
INV. B41J11/00 B41J2/17

Applicant  
CANON KABUSHIKI KAISHA

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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Date of completion of  
this opinion

see form  
PCT/ISA/210

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**International application No  
PCT/JP2005/021634

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**Box No. I Basis of the opinion**

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1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material:

- ☐ a sequence listing
- ☐ table(s) related to the sequence listing

b. format of material:

- ☐ on paper
- ☐ in electronic form

c. time of filing/furnishing:

- ☐ contained in the international application as filed.
- ☐ filed together with the international application in electronic form.
- ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No  
PCT/JP2005/021634

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**Box No. V Reasoned statement under Rule 43bis.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-11
	No: Claims	
Inventive step (IS)	Yes: Claims	1-11
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-11
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**Re Item V.**

- 1 Reference is made to the following documents:  
D1 : US 2003/030692 A1 (UCHIDA KOTA) 13 February 2003 (2003-02-13)
- 2 Document D1, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):  
An ink jet printing apparatus (M1001) for printing by ejecting ink containing a colorant from a print head (H1000) comprising:  
at least one ink absorber (M2006), absorbing the ink discharged from the printhead.  
From this, the subject-matter of independent claim 1 differs in that:  
the absorber contains a coagulation inhibitor, that inhibits the coagulation of the colorant contained in the ink
- 2.1 The subject-matter of claim 1 is therefore novel (Article 33(2) PCT)  
The problem to be solved by the present invention may be regarded as:  
Ink coagulates in the absorber, which becomes full and can no longer absorb
- 2.2 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:  
No document shows an ink absorber with a coagulation inhibitor.
- 2.3 Claims 2-8 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.
- 3 Document D1, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):  
see 2. above

From this, the subject-matter of independent claim 9 differs in that:  
the apparatus also has an application means for applying a coagulation inhibitor.

- 3.1 The subject-matter of claim 9 is therefore novel (Article 33(2) PCT)  
The problem to be solved by the present invention may be regarded as:  
Treat the ink absorber in such a way, that the colorant of the ink does not coagulate in the absorber
- 3.2 The solution to this problem proposed in claim 9 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:  
No document shows an ink jet printing apparatus with an application means for applying a coagulation inhibitor
- 4 Document D1, which is considered to represent the most relevant state of the art, discloses (the references in parentheses applying to this document):  
An ink absorber that has been produced  
From this, the subject-matter of independent claim 10 differs in that:  
The method of production involves immersing the ink absorber in a liquid containing the coagulation inhibitor followed by drying the absorber
- 4.1 The subject-matter of claim 10 and 11 is therefore novel (Article 33(2) PCT)  
The problem to be solved by the present invention may be regarded as:  
Treating the ink absorber in such a way that ink does not coagulate in the absorber.
- 4.2 The solution to this problem proposed in claim 10 and 11 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:  
No document shows a method of manufacturing an ink absorber with coagulation inhibiting properties